



1

SEQUENCE LISTING

<110> Mitsuhashi, Kazuya
Yamamoto, Hiroaki
Matsuyama, Akinobu
Tokuyama, Shinji

<120> D-AMINOACYLASE AND GENE ENCODING THE SAME

<130> 06501-072001

<140> US 09/770,517
<141> 2001-01-26

<150> JP 2000-019080
<151> 2000-01-27

<150> JP 2000-150578
<151> 2000-05-22

<160> 27

<170> PatentIn Ver. 2.0

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<213> Hypomyces mycophilus

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ggtttcatcg atatgcacgc gcatttcagac ctctacctac tctctcatcc tgaccacgag 240
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ccaattcgta atgttagacca gttgagggcg atccgagaac agattgctgg atggaatggc 360
aatcctacag atgaggagtg ccggacaact ctcaaaggcg ttggcatgtt tgaatggcag 420
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ttggttccgc aaggcaacct gagattattt gcatgtggcc catacgatac tccagcatct 540
gcagaagaga ttcaagatca aatccagctc ttgcgagagg ctatggctca gggtgctgtc 600
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aaggataagc tcgcaacgac ctgtatcatg catgttggca atgaagaaaa cgtccgacag 1260
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TECH CENTER 1600/2900

SEP 13 2001

RECEIVED

Ala Gly Gly Pro Gln Glu Thr Leu Lys Arg Leu Glu Asp Ala Glu Ser
 325 330 335
 Arg Glu Lys Ile Arg Ile Ala Val Glu Ile Lys Gly Cys Asp Gly Gly
 340 345 350
 His Gly Ile Pro Thr Asn Trp Asp Glu Ile Gln Ile Gly Thr Thr Asn
 355 360 365
 Glu Pro Ser Ile Ala Ser Tyr Ser Gly Arg Arg Leu Ser Glu Val Ala
 370 375 380
 Gln Ser Val Gly Lys Pro Thr Ile Glu Val Phe Phe Glu Ile Leu Gln
 385 390 395 400
 Lys Asp Lys Leu Ala Thr Ser Cys Ile Met His Val Gly Asn Glu Glu
 405 410 415
 Asn Val Arg Gln Ile Met Gln His Arg Val His Met Ala Gly Ser Asp
 420 425 430
 Gly Ile Leu His Gly Gln Thr Leu His Pro Arg Ala Tyr Gly Thr Phe
 435 440 445
 Thr Arg Tyr Leu Gly His Tyr Ser Arg Glu Leu Ser Leu Val Ala Leu
 450 455 460
 Pro Ser Met Ile Ala His Leu Thr Ser Arg Pro Ala Lys Arg Leu Ser
 465 470 475 480
 Val Tyr Pro Tyr Arg Gly Leu Ile Ala Glu Gly Ser Ala Ala Asp Ile
 485 490 495
 Val Val Phe Asn Pro Glu Thr Val Lys Asp Met Ser Thr Tyr Glu Glu
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 Pro Lys Val Pro Ser Arg Gly Ile Arg Phe Val Leu Val Asn Gly Gln
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<223> n is a, t, c, or g

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<210> 5

<211> 20

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<221> misc. feature

<222> 3, 6, 15

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<210> 6

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<222> 3, 9

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<210> 7

<211> 321

<212> DNA

<213> Hypomyces mycophilus

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<400> 8

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<210> 9

<211> 20

<212> DNA

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<400> 9

attggggaat acttggattg

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<210> 10

<211> 20

<212> DNA

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<223> Artificially Synthesized Primer Sequence

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<210> 11

<211> 20

<212> DNA

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<223> Artificially Synthesized Primer Sequence

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<210> 12

<211> 1325

<212> DNA

<213> Hypomyces mycophilus

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tgcattctat ggcgcacatc atagaagttt tgggttccag gccatcgaaa gttatgccga 300
aatgttggat ctcggagagt caacaggctg tcccattcat cttacacatg caacgctcaa 360

| | |
|---|------|
| ctttcagaa aataaggta aagtcctgt cctcatctct atggttgata aatcttgc | 420 |
| tgcaggcgtg gatgtcacac ttgatacgtt tccatacttg ccaggctgtt caactctggc | 480 |
| tgcattgctg ccaagtcccc catctgctgg cgccccacaa gagacgttta aaaggcttga | 540 |
| ggatgcagaa tcgagagaaa agattcgat agccgtggaa atcaaagggt gtatggcgg | 600 |
| ccatggtatt ccaaccaact gggacgaaat ccagatcggtt acgactaatg aaccatcaat | 660 |
| cgcacatgtat tctggtcgca gcgttatcaga agtgcacag tctgttgaa agccgaccat | 720 |
| cgaagtcttt ttcgagattc tgcaaaagga taagctcgca acgagctgtt tcatgcattgt | 780 |
| tggcaatgaa gaaaacgtcc gacagatcat gcagcatcggtt gtccatatgg caggcagtga | 840 |
| tggatcttgcacggcaga cgctacacc acgagcttgcaccc ggcacattca cgccgtattt | 900 |
| aggacactat tctcgtaac tctcgcttgcaccc tgcgttatgc tccatgtatgc ctcacccat | 960 |
| atcacggccc gccaacgcac ttccgtata tccatatcgcc ggtctgattt ctgaaggatc | 1020 |
| cgcgtccgac attgtggttt ttaaccccgaa aacgtaaag gatatgtcga cgtatgaaga | 1080 |
| gccaaagggtt ccaagtcccc gcatttagatt tgttcttagtt aacggccaga tagctgtggaa | 1140 |
| cgaaggcaag atgacaggca caagaggggg taaaacactg agaagaagca ccgatggcaa | 1200 |
| ggtaaggca agagatgagt aaagtctcgatccgc cgtgcacccaaac aacaggatca | 1260 |
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| caata | 1325 |

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<210> 14

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<400> 14

cgcaggctat cagaagtggc

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<210> 15

<211> 20

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<210> 16

<211> 20

<212> DNA
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<400> 16
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<212> DNA
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<400> 17
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<210> 18
<211> 22
<212> DNA
<213> Artificial Sequence

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<400> 18
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<220>
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<400> 19
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aatcttggca atcagtcct tcgaaaccag cacatcgGCC acaaaggGCT gggctgcttc 180
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<220>
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<400> 21
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<210> 22
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<212> DNA
<213> Hypomyces mycophilus

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| | | | | | | |
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| cactcagcca | ctgttatcac | cggcgatgaa | gcagccccgc | ccttgcggc | cgatgtgctg | 180 |
| gtttcgaagg | gactgattgc | caagattgt | aaccccgtt | ccatcaatgc | aactccagat | 240 |
| acgcggcata | tcgacgtcac | aggctacatt | ctatctcctg | gtttcatcga | tatgcacatgc | 300 |
| cattcagacc | tctacctact | ctctcatcct | gaccacgagg | ccaaaatcac | ccaaggatgc | 360 |
| acaacggaaag | ttgtggcca | agacgggata | tcatatgcac | caattcgtaa | tgttagaccag | 420 |
| ttgagggcga | tccgagaaca | gattgctgga | tggaatggca | atcctacaga | tgaggagtgc | 480 |
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| agattattgg | catgtggccc | atacgatact | ccagcatctg | cagaagagat | tcaagatcaa | 660 |
| atccagctct | tgcgagaggc | tatggctcag | ggtgctgtcg | ggatgtctag | tggctctact | 720 |
| tatacacccg | gcatgtatgc | ttccacgtcg | gaactagctt | ctctgtgcgc | ggccctcgca | 780 |
| caagaatttc | caggtgcatt | ctatgcgcac | catcatagaa | gttatgggtt | ccaggccatc | 840 |
| gaaagttatg | ccgaaatgtt | ggatctcgcg | gagtcacacg | gctgtcccat | tcatcttaca | 900 |
| catgcaacgc | tcaactttc | agaaaataag | ggtaaagctc | ctgtcctcat | ctctatggtt | 960 |
| gataaaatctc | ttgctgcagg | cgtggatgtc | acacttgata | cgtatccata | cttgcaggc | 1020 |
| tgtacaactc | tggctgcatt | gttgc当地 | tggcatctg | ctggcggccc | acaagagacg | 1080 |
| cttaaaaggc | ttgaggatgc | agaatcgaga | gaaaagattc | gtatagccgt | gaaaatcaaa | 1140 |
| gggtgtgatg | gccccatgg | tattccaacc | aactgggacg | aatccagat | cgggacgact | 1200 |
| aatgaaccat | caatcgcatc | gtattctgtt | cgcaggctat | cagaagtggc | acagtctgtt | 1260 |
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| tgtatcatgc | atgttggcaa | tgaagaaaac | gtccgacaga | tcatgcagca | tcgggtccat | 1380 |
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| ttcacgcgg | atttaggaca | ctattctcgt | gaactctcgc | tttgtct | gccgtccatg | 1500 |
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| agcaccgatg | gcaagggtgaa | gcacaaagat | gagtaaagtc | tcgatctgca | tccgcgtgcc | 1800 |
| caacaacagg | atcaagtcgt | cacagcatga | tacggcaggc | tttggagtag | ataccatgtc | 1860 |
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<210> 26

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<212> PRT

<213> Hypomyces mycophilus

<400> 26

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Leu Tyr Leu Leu Ser His Pro Thr His

20 25

<210> 27

<211> 20

<212> PRT

<213> Hypomyces mycophilus

<400> 27

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Ser Arg Gly Phe

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